

Clean Water Program Accomplishments 2001 to Present

Program Administration

Facilitation

- ◆ Successful at supporting the Clean Water Commission in its role of providing a review of Clean Water Program activities and budget. This allows Clean Water Commissioners an opportunity to share Clean Water Program management recommendations with the Board of County Commissioners. The annual report to the Board is an example of this activity.

Coordination

- ◆ Through coordination and collaboration with other county departments and offices, the Clark County Clean Water Program Service fee is successfully being collected each year. Funds collected support implementation of: regulation and enforcement; operations and maintenance; water quality monitoring, data base management, and reporting; public education and outreach; stormwater capital improvements; and administration and coordination.

Partnerships

- ◆ Clark County Public Works, Water Resources is actively partnering with local groups and organizations and with local, state, and federal agencies to optimize implementation of Clean Water Program activities. This approach is furthering public outreach and education, and participation in protecting local water resources.

Clean Water Program Accomplishments 2001 to Present

Enforcement

- ◆ Enforcement and development review staff allocated to development activities in Clark County increased 5.5 FTE above pre-Clean Water Program levels.
- ◆ Staffing (5.5 FTE) responsibilities are shared among 25 total FTEs, increasing effectiveness.
 - 1 FTE building inspector (shared over staff of 18 FTE) to enhance the county's erosion control and storm water monitoring effort at construction sites
 - 2 FTE – development review inspector/engineering technician (shared over staff of 7 FTE) to further enhance the county's ability to provide stormwater and erosion control enforcement and review
 - 2 FTE – code enforcement officers dedicated to the Clean Water Program providing water quality and erosion control enforcement
- ◆ Development regulated to minimize its potential sediment release and discharge rates to local water bodies
 - All development project designs reviewed for compliance with NPDES requirements prior to approval.
 - All developers required to have an erosion control specialist on staff before projects are approved for construction
 - Development inspectors monitor project sites at least once a week and final erosion control inspection is completed before projects are forwarded to building inspectors
 - Code Enforcement monitors projects to make sure erosion control measures are in effect
- ◆ Citizens and contractors provided with education and technical assistance to comply with local codes.
 - Certification classes developed
 - Educational presentations to contractors and excavators developed
 - Increased one-on-one education provided to contractors and homebuilders
- ◆ Code enforcement staff note improvements in the erosion control measures implemented by developers and builders.

Clean Water Program Accomplishments 2001 to Present

Maintenance and Operations

- ◆ Met 100 percent of NPDES required maintenance activity levels:
 - 6700 catch basins inspected annually - cleaned as needed
 - 2400 manholes inspected annually – cleaned as needed
 - 900 drywells inspected every 3-5 years – cleaned as needed
 - 161 retention and detention facilities mowed and weedeated 3-4 times per year
 - 334 biofiltration swales mowed and maintained 3-4 times per year
 - 158 county vehicles with spill response kits
 - 7650 feet of storm sewer pipe inspected and maintained as necessary
 - 40 main arterials swept 12-14 times per year and litter removal done 4 times per year
 - 42 neighborhood sections (areas) swept 9 times per year
- ◆ Inspection program for private stormwater facilities implemented

Clean Water Program Accomplishments 2001 to Present

Monitoring, Data Management, and Reporting

General

- ◆ Completed several pre-permit monitoring projects and combined remaining projects into a single monitoring program:
 - Lacamas Lake monitoring
 - Lacamas nutrient loading estimates
 - Drywell retrofit monitoring
 - Miscellaneous stream and rainfall gauges for several projects
- ◆ Assembled staff of water resource scientists, all with masters degrees and water resource experience
- ◆ Obtained approximately \$400,000 in grants from Ecology to perform Water Resources Section's projects
- ◆ Coordinate activities with local agencies such as Clark Public Utilities and the Lower Columbia Fish Recovery Board and with county programs such as Endangered Species Act program to eliminate redundant activities and provide more uniform approach to data gathering

Monitoring

- ◆ Created a monitoring support program that developed quality assurance and quality control plans and standard operating procedures for monitoring activities
- ◆ Implemented standard procedures and quality assurance through training
- ◆ Developed an Access database structure for monitoring data which is being converted into the county GIS database system in the summer of 2003.
- ◆ Completed testing the efficiency of a stormwater treatment retrofit facility for the Public Works Operations Center
- ◆ Upgraded four existing stream flow and three rainfall gauges and constructed eight additional stream gauges and four rain gauges under a Department of Ecology grant
- ◆ Began a program to screen storm sewer for non-stormwater discharges during summer months, then find and remove them
- ◆ Initiated a program to assess stream health trends over time at ten initial sites
- ◆ Expanded lake condition monitoring at Lacamas Lake and Battle Ground Lake

- ◆ Established a volunteer monitoring program training 35 volunteers to collect usable macro invertebrate and water quality data at four county sites

Reporting

- ◆ Completed annual permit reports to the Department Ecology for permit compliance

Clean Water Program Accomplishments 2001 to Present

General Education and Outreach

General Education and Outreach

- ◆ Participated in the Regional Coalition for Clean Rivers and Streams and two regional advertising campaigns for clean water – included transit, cinema, and newspapers.
- ◆ Piloted Science in the Parks program, summer of 2002. (Program modified to Watershed Stewards setting up info tables along popular walking trails in summer of 2003)
- ◆ Maintained volunteer storm drain stenciling program
- ◆ Produced annual Clean Water Billing Inserts
- ◆ Produced annual Clean Water Program Updates for the general public
- ◆ Co-sponsored the annual Lacamas Lake Watershed Festival and Kids Fishing Derby(s)
- ◆ Clean Water Program represented by staff and volunteers at following annual community events:
 - Lacamas Festival
 - Earth Day at Hewlett Packard
 - Earth Day display at Wafertech
 - Earth Night at Clark College
 - CASEE Earth Day Celebration
 - Home and Garden Idea Fair
 - Hummingbird Festival
 - Sturgeon Festival
 - Clark County Fair
 - La Center Steamboat Days
 - Washougal Heritage Days
 - WSU Field Day and Vancouver Research Station
 - Natural Gardening Fair
 - Summer Solstice at CASEE

Adult-Based Education and Outreach

- ◆ Established and continue to supervise Watershed Stewards Program (revamped from pilot program begun under East Fork and Lacamas Program
 - 87 volunteers trained since 2000

- 2631 hours contributed 2001-2002 at equivalent dollar value of \$41,421 (based on Economic Report of the President)
 - 20,578 public outreach contacts 2001-2002
- ◆ Established and supervise outreach program for small acreage landowners. (pooled funding and resources from the Clean Water Program, Clark Conservation District, and WSU Cooperative Extension)

Youth-Based Education and Outreach

- ◆ Participated in the annual Youth Town Hall by sponsoring a tour of the Lacamas Watershed for high school students
- ◆ Contributed funding and staff time to the Envirothon competition hosted by Clark Conservation District
- ◆ Established fee waiver program for schools
- ◆ Partnered in the Environmental Information Cooperative providing outreach to teachers and students
- ◆ Presented River Rangers to 4th graders
- ◆ Partnered with City of Vancouver to expand student monitoring education program into schools in unincorporated Clark County
- ◆ Contracted with Portland State University and the Student Watershed Research Project to provide upper level monitoring education in 3 high schools.
- ◆ Partnered with the Solid Waste section to provide Mother Natures Garden Puppet Show for grades K-3
- ◆ Partnered with the Solid Waste section to provide Earthsavers program for 6th grade students

Clean Water Program Accomplishments 2001 to Present

Stormwater Technical Education and Outreach

Technical Assistance Businesses

- ◆ Provided technical assistance to 340 businesses
- ◆ Presented Clark County's new stormwater program and new BMP Manual to business associations, including Hazel Dell /Salmon Creek Business Association, Battle Ground Chamber of Commerce and the Greater Vancouver Chamber of Commerce.
- ◆ Clark County Commissioners adopted Clark County Stormwater Pollution Control Manual – Best Management Practices (BMPs) for Businesses and Government Agencies (BMP Manual).
- ◆ Technical assistance provided to all identified source control businesses in Cougar Creek and Suds Creek Sub-Basins.

General Technical Outreach

- ◆ Present the Enviroscope to hundreds every year at the Home and Garden Idea Fair.
- ◆ Speaker at Northwest Environmental Conference
- ◆ Speaker at NW Water Quality Conference
- ◆ Worked on technical committee that drafted the City of Vancouver's Water Resources Protection Ordinance.

Residential Technical Education

- ◆ Responded to 111 complaint calls
- ◆ Provided site visits to farms and private residences upon request.

School-based Technical Education

- ◆ Met with Clark County school districts' groundskeeping, maintenance and custodial staffs regarding stormwater pollution prevention BMPs. School districts include Vancouver, Evergreen, Camas, Ridgefield, Hockinson, Battle Ground, and Green Mountain.
- ◆ Presented the Enviroscope stormwater model in classrooms to over 500 students in 4th, 5th, and 6th grade throughout Clark County.
- ◆ Worked with Vancouver School District to adopt and implement an integrated pest management policy to reduce the use of pesticides in buildings and as part of landscape maintenance.
- ◆ Presented stormwater education audits to over 1200 students as part of the Earthsavers Program for Clark County 6th and 7th graders.

Clean Water Program Accomplishments 2001 to Present

Engineering and Capital Programs

Development of the Capital Framework

- ◆ **Pilot capital projects**
 - Four capital projects
 - Thomas Wetland
 - Salmon Cr/Hwy 99 Water quality filter
 - I-205 Bridge @ Salmon Creek water quality improvement
 - Cougar Creek Infiltration Project
 - \$800,000 total cost
 - On track for construction 2003
 - System established for project implementation by Transportation CIP
- ◆ **Ongoing Programs**
 - \$375,000 over 2003-2005 recommended by CWC
 - Existing stormwater facility retrofit
 - Rain drain disconnect assistance program
 - Adding treatment for existing high risk drywells
 - Oversizing assistance
 - Riparian restoration work
- ◆ **Interim Capital Plan**
 - Twenty one projects ranked by CWC CIP Subcommittee(see map and list)
 - Initial \$2,213,000 (ten projects) recommended by CWC
 - Additional \$1,685,000 (additional 9 projects) under discussion
- ◆ **Final Basin Specific Project Lists (proposed actions)**
 - Construction to begin 2006
 - Prioritize basins for plan development
 - Update and extend basin flow models
 - Revise existing unadopted studies to reflect current standards and technology
 - Add water quality and habitat considerations
 - New basin plans
 - Ranked project lists for each basin

System Inventory and Mapping

- Pre CWP efforts were intermittent and incomplete
- Current program involves Construction/Survey, Maintenance and Operations, GIS, and Community Development

- ◆ **Pipe Systems**
 - Original database had 4000 +/- segments within the county
 - Current product has 23,500 such segments
- ◆ **Stormwater Facilities No comprehensive inventory prior to CWP**
 - Public SWF database is complete (455 sites)
 - Private SWF 60% complete (670 to date)
- ◆ **Rural Ditches and Culverts**
 - Fieldwork complete, mapping and database entry underway
- ◆ **Condition Surveys**
 - Survey of Bioswales 90% complete
 - Condition survey of all facilities underway
 - Initial valuation of off-ROW sites complete (\$67,000,000)
- ◆ **Ongoing Maintenance of Inventory**
 - System is in place for transfer of development information for addition to database as projects are completed.

Engineering Support

- Technical support for legal, risk management and CWP administrative staff for fee appeals and lawsuits against the program.
- Coordination and technical support for Development Review
- Technical support and oversight of Maintenance & Operations stormwater activities
- Response to public's enquiry's and complaints in regards to stormwater issues
- Response to engineering community and other agency's requests for modeling and stormwater system data.
- Provided GIS and database programming services to the rest of the CWP and NPDES section of Maintenance and Operations

Basin Planning

- Coordination with local agencies regarding project planning, watershed assessments and other programs:

- ◆ ESA office
 - ◆ Transportation CIP
 - ◆ Cities of Camas, Vancouver
 - ◆ WSDOT
 - ◆ LCFRB
 - ◆ Parks
 - ◆ CPU
- Obtained and manages DOE grant for watershed characterization as joint project with LCFRB
 - Provides technical support to Monitoring group for development of stream and rain gage program.
 - Updated Salmon Creek flow model to current technology in cooperation with CPU
 - Providing technical support to DOE funded Wetland Banking study
 - Will be part of team with Monitoring and Public Outreach as the watershed planning process continues.

Q:\Admin\11180 element 203 admin\2003 Accomplishments-Q & A\cwp combined accomplishments 06-13-2003.doc